

# Top 10 risks

	Risk	Details	Mitigation Measure	Timing
1	<b>Contamination</b>	<ul style="list-style-type: none"> <li>The risk of contamination below and above watercourses</li> <li>Existing site contamination</li> <li>Leaching contamination from surrounding area</li> <li>Site History (previous use)</li> <li>Buried contamination (landfill, asbestos, etc.)</li> <li>Noise &amp; Dust generated during the works</li> </ul>	<ul style="list-style-type: none"> <li>Detailed survey to be undertaken</li> <li>Monitoring to be undertaken as suggested by survey company</li> <li>Early Subcontract engagement to develop mitigation strategies</li> </ul>	<ul style="list-style-type: none"> <li>Surveys should be undertaken no later than RIBA Stage C</li> <li>All survey durations must be understood by the team and included on the master programme</li> </ul>
2	<b>Ground Conditions</b>	<ul style="list-style-type: none"> <li>Soft spots</li> <li>Clay (bulking)</li> <li>Chalk (sinkholes)</li> <li>Running sands</li> <li>Perched/Ground/Surface Water</li> <li>Topography</li> <li>Distribution of materials during the works</li> <li>Unexploded Ordnance – Bombs etc.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed surveys to be undertaken</li> <li>Early Subcontract engagement to develop mitigation strategies</li> <li>Bespoke logistic strategies to be developed early</li> </ul>	<ul style="list-style-type: none"> <li>Surveys should be undertaken no later than RIBA Stage C</li> <li>Logistic strategy must be agreed prior to a planning submission being made (RIBA Stage D)</li> </ul>
3	<b>Market Conditions</b>	<ul style="list-style-type: none"> <li>Indices</li> <li>Supply &amp; Demand (attractiveness of the works)</li> <li>Location factors</li> <li>Lead-in considerations</li> </ul>	<ul style="list-style-type: none"> <li>Make the project attractive to the market</li> <li>Early procurement</li> <li>Identification of local suppliers</li> </ul>	<ul style="list-style-type: none"> <li>The management of the supply chain is key to mitigation of risk allowances</li> <li>Top ten (By value) B/C's should be identified prior to RIBA Stage D</li> </ul>
4	<b>Asbestos</b>	<ul style="list-style-type: none"> <li>Management of known and unknown asbestos</li> <li>Quality of survey</li> <li>Programme implications</li> <li>HSE Notification</li> <li>Buried Asbestos</li> <li>Air testing following survey works</li> <li>Confined space (access &amp; removal)</li> <li>Making good survey works</li> <li>Survey works within occupied buildings</li> </ul>	<ul style="list-style-type: none"> <li>A Refurbishment and Demolition (Old Type 3) survey is required</li> <li>All room, ducts &amp; voids must be surveyed</li> <li>External ducts to be surveyed</li> <li>Cross reference ground survey information</li> <li>Early demolition of a building (enabling works) should be considered to prevent delays to the main works programme</li> </ul>	<ul style="list-style-type: none"> <li>The Refurbishment and Demolition survey should be undertaken when the building has been vacated.</li> <li>Incomplete surveys will attract risk allowances</li> <li>Ducts may be hidden behind walls that are not accessible until the demolition works commence</li> </ul>
5	<b>Existing Buildings</b>	<ul style="list-style-type: none"> <li>Condition of existing buildings</li> <li>Existing foundations</li> <li>Structural loads</li> <li>Derogation schedules – particularly important as it may be difficult to be fully compliant with industry standards such as Building Bulletins</li> <li>Defects liability</li> <li>Warranties</li> <li>BREEAM</li> <li>Multi-trade procurement</li> </ul>	<ul style="list-style-type: none"> <li>Full structural and building surveys required from roof through to foundations</li> <li>Internal layouts must be surveyed accurately</li> <li>Intrusive surveys affecting walls, floors and ceilings are required</li> <li>Early Multi Trade procurement to be considered</li> </ul>	<ul style="list-style-type: none"> <li>Structural and Building surveys must be undertaken prior to RIBA Stage C design commences</li> </ul>
6	<b>Utilities Suppliers (existing and new)</b>	<ul style="list-style-type: none"> <li>Loadings for new and existing buildings</li> <li>Utilities upgrade works (off site)</li> <li>Below ground services (incl unidentified)</li> <li>Quality of survey</li> <li>Hand digging around live services</li> <li>Temporary services required during upgrade works</li> <li>Temporary services required during works</li> <li>Sub-metering</li> <li>Lead-in times</li> <li>Fixed price period</li> <li>Diversion and lowering of services</li> <li>Capacity affected by other developments</li> </ul>	<ul style="list-style-type: none"> <li>Utilities Matrix to be developed and linked to the Master Programme</li> <li>Utilities searches to be obtained</li> <li>Below ground survey to be commissioned</li> <li>Understand existing loadings to determine capacity</li> <li>Budget quotations to be obtained from utilities companies</li> <li>Pay deposits to utilities companies to convert from budget to fixed price</li> </ul>	<ul style="list-style-type: none"> <li>All searches, loadings and surveys to be undertaken prior to RIBA Stage C</li> <li>Monitoring of Utility Company lead-in is key and will affect</li> </ul>
7	<b>Working within 'live' environments</b>	<ul style="list-style-type: none"> <li>Segregation (Hoarding, barriers &amp; signage)</li> <li>Integration during the works</li> <li>Shared access</li> <li>Security (Gateman &amp; Guarding)</li> <li>Haul roads</li> <li>Programme delays (exams)</li> <li>Out of hours working</li> </ul>	<ul style="list-style-type: none"> <li>Client engagement</li> <li>Dedicated logistic and operation meetings with Client teams</li> </ul>	<ul style="list-style-type: none"> <li>Early engagement is key when working within a live environment</li> <li>Contractor appointment RIBA Stage C will reduce risk allowances and manage expectations</li> </ul>
8	<b>Planning</b>	<ul style="list-style-type: none"> <li>Delay to the programme</li> <li>Purdah</li> <li>Value Management Engineering</li> <li>Submission prior contractor appointment</li> <li>Consultation</li> <li>Judicial Review</li> <li>Green Belt</li> <li>Gateway management</li> <li>Planning conditions</li> </ul>	<ul style="list-style-type: none"> <li>Detailed understanding of the planning process must be captured on the Master Programme</li> <li>Local Authority Governance must be understood and captured on the Master Programme</li> <li>Build in a 'buffer' to accommodate planning delays</li> </ul>	<ul style="list-style-type: none"> <li>The design and budget must align prior to a Planning Submission being made.</li> <li>Value Management (Area, form, look and feel) to commence RIBA Stage C</li> <li>VE (does not affect Planning) to commence RIBA Stage E</li> </ul>
9	<b>Regulatory Compliance</b>	<ul style="list-style-type: none"> <li>DDA</li> <li>Acoustic</li> <li>BREEAM</li> <li>Highways</li> <li>Building Regulations</li> <li>Boundaries</li> <li>Land designation</li> <li>106 – planning clause requirements such as financial contributions to support local community facilities</li> <li>278 – Highways – Often these works sit outside of the site boundary and may require approved contractors to undertake the works</li> <li>Any EFA Targets?</li> </ul>	<ul style="list-style-type: none"> <li>Clear Client brief</li> <li>Specialist consultant appointment</li> <li>Consultation</li> <li>Early Building Regulation submission</li> </ul>	<ul style="list-style-type: none"> <li>Early engagement will provide certainty of delivery and price</li> <li>Specialist consultants appointed at RIBA Stage C will ensure the design is compliant</li> <li>A Regulatory Compliance tracker document should be provided at RIBA Stage C</li> </ul>
10	<b>Contract</b>	<ul style="list-style-type: none"> <li>Amended form of contract</li> <li>Payment terms</li> <li>Appointment documents</li> <li>Limited Letter of Intent</li> <li>Delayed contracts</li> <li>Employers Requirements and Contractor Requirements</li> </ul>	<ul style="list-style-type: none"> <li>Un-amended form of contract</li> <li>Understand Client Appointment Governance</li> <li>Plan for contracts to be in place before works commence</li> </ul>	<ul style="list-style-type: none"> <li>The contract should be discussed and agreed prior to RIBA Stage E</li> </ul>